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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,833	09/29/2003	Darin Gerlach	39262/287702	2529

7590 05/15/2006
Chief Patent Counsel
SMITH & NEPHEW, INC.
1450 Brooks Road
Memphis, TN 38116

EXAMINER

PHILOGENE, PEDRO

ART UNIT	PAPER NUMBER
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3733

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,833

Applicant(s)

GERLACH ET AL.

Examiner

Pedro Philogene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/30/04, 3/2/04, 3/28/05, 2/17/06</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,5,7,9-14,17,18,20-23,25-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Weaver et al. (6,623,486).

With respect to the claims, Weaver et al disclose a bone plate (30,50) comprising an upper surface (32,52); a lower or bone contacting surface (34,54); and at least one hole (36,38,56,58) extending through the upper surface and the bone contacting surface that may interchangeably receive locking screw (20), and a compressive screw (10), wherein each hole includes a thread (40) that makes a complete revolution around the hole; as best seen in the FIGS., the top portion extending from the upper surface; and the bottom portion extending from the top portion to the bone contacting surface, wherein the bottom portion is threaded; as best seen in FIG. 4; wherein the top portion extends from the upper surface at a first angle relative to the upper surface; as best seen in FIG.6; the top portion includes a ramp (44) extending from the upper surface at a first angle relative to the plane of the upper surface and a concave recessed portion that is generally spherical; as best seen in FIGS.11-16; wherein the bottom portion is generally cylindrical; as best seen in FIG.16; wherein threads of each hole are

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configured to received threads of a head of a locking screw (20); wherein each of the hole is configured to engage a head of a compression screw (10) and provide compression of fractured bone fragments such that fine adjustment of the fracture of up to two millimeters in more than one direction is possible; wherein the head of the locking screw and the hole are tapered, as best seen in the FIGS; wherein the locking screw includes a head with triple lead threads and a single lead thread shaft such that all threads of the locking screw are of a substantially equivalent pitch; as best seen in FIG.2, the lead is not continuous between the treads of the head and the threads of the shaft of the locking screw, as best seen in FIG.2.

With respect to claims 29-30, the method steps, as set forth, would have been inherently carried out in the operation of the device, as set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,6,8,15,16,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al. (6,623,486) in view of Frigg et al. (6,821,278).

With respect to the above claims, it is noted that Weaver et al did not teach of a first angle about fifty-two degrees and a bottom portion with an included angle of less than about thirty degrees; as claimed by applicant. However, in a similar art, the use of a plate with hole making an angle with an upper surface and a taper in the bottom

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portion with an included angle of about 5 degrees to about 120 degrees, preferably about 20 degrees; which is well within the angle as claimed by applicant.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Weaver et al as taught by Frigg et al, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,322,562	11-2001	Wolter
6,206,881	03-2001	Frigg et al.
6,730,091	05-2004	Pfefferle et al.

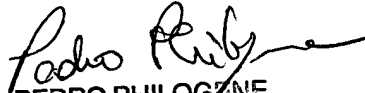
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (571) 272-4716. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272 - 4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro Philogene
May 10, 2006



PEDRO PHILOGENE
PRIMARY EXAMINER